

PAUL HASTINGS

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September 27, 2013

36127-00004

BY HAND

Beverly Kolenberg
Assistant Regional Counsel
Office of Regional Counsel
U.S. Environmental Protection Agency
290 Broadway, 17th Floor
New York, NY 10007-1866

Re: New Cassel/Hicksville Ground Water Contamination Superfund Site
Response of GTE Operation Support Incorporated to the EPA Section 104(e) Information
Request

Dear Ms. Kolenberg:

Attached is an executed response for GTE Operation Support Incorporated ("GTEOSI") to the Information Request dated July 31, 2013 ("Request") from the United States Environmental Protection Agency, Region II ("EPA") pursuant to CERCLA Section 104(e) concerning the New Cassel/Hicksville Ground Water Contamination Superfund Site in the Towns of Hempstead, North Hempstead and Oyster Bay in Nassau County, New York ("Site"). Pursuant to my request in late August, you granted GTEOSI an extension until September 27 to respond to this Request. Please note that GTEOSI objects to EPA's Request to the extent that it is unnecessarily broad, irrelevant and burdensome. GTEOSI also believes that there are no facts or scientific basis to conclude that any groundwater contamination that may be associated with its operations at the Properties would impact the Site nor flow to or impact OU-1 of the Site.

Because of the long time period covered by the request, the dates involved and the breadth of information requested, it is likely that GTEOSI has not found all relevant responsive information. Additionally, while GTEOSI endeavored to answer the questions in the Request to the fullest extent reasonably possible and conducted a good faith search of the records in its possession, custody and control, all of the historic operations took place long before GTEOSI became associated with the Properties. Thus it has no first-hand knowledge with respect to the information related to the operational history contained in its response, and its responses relevant to historic operations are based upon information obtained primarily from the Federal Government. It is not clear that the Federal Government has disclosed all of the relevant historic operating documents to GTEOSI; nevertheless, the responses were pieced together from the documents received.

The enclosed information is being provided in an effort to cooperate with EPA, without admitting or acknowledging that EPA has the authority to require production of the requested information, or that the statutory authority cited in the Request is applicable. Additionally, nothing in this response should be construed as an admission of any liability or responsibility on the part of GTEOSI regarding any costs incurred by EPA or any other party relating to the Site. GTEOSI reserves all defenses and rights available to it under the law. For all of the reasons noted above which make providing a response difficult, such as the considerable period of time that has passed since the relevant operations and the dependence on the Federal Government for information relating to businesses that were classified at the

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time of operation, as well as the time constraints imposed by EPA for providing a response, GTEOSI reserves the right to update this response if it uncovers additional relevant information.

Please feel free to contact the undersigned if you have any questions regarding GTEOSI's response to the Request.

Sincerely,



Lisa K. Rushton
of PAUL HASTINGS LLP

LKR

cc: Ms. Jennifer LaPoma, Remedial Project Manager, Emergency and remedial Response Division,
US EPA

**RESPONSE FROM GTE OPERATION SUPPORT INCORPORATED
TO U.S. EPA'S 104(E) REQUEST FOR INFORMATION**

1.
 - a. **State the correct legal name and mailing address of your Company.**
 - b. **State the name(s) and address(es) of the President, Chief Executive Officer and the Chairman of the Board (or other presiding officer) of the Company.**
 - c. **Identify the state and date of incorporation of the Company and the Company's agents for service of process in the state of incorporation, and in New York State.**
 - d. **If your Company is a subsidiary or affiliate of another corporation or entity, identify each of those other corporations or entities and for each, the President, Chief Executive Officer and Chairman of the Board. Identify the state of incorporation and agents for service of process in the state of incorporation and in New York State for each corporation identified in your response to this Question.**
 - e. **If your Company is a successor to or has been preceded by another entity, identify such other entity and provide the same information as requested in 1.d., above.**

Response

- a. GTE Operation Support Incorporated ("GTEOSI")
600 Hidden Ridge, Irving, TX 75038
- b. Director and President: Connia Nelson
One Verizon Way, VC34W453, Basking Ridge, NJ 07920

Director and Vice President/Controller: Jean Agostinelli
One Verizon Way, VC34W453, Basking Ridge, NJ 07920
- c. GTEOSI, a Delaware Corporation, was incorporated on December 18, 1991.
Agents for service of process: CT Corporation System
 - o The Corporation Trust Company
Corporation Trust Center
1209 Orange Street
Wilmington, DE 19801
- d. GTEOSI is a subsidiary of GTE Products of Connecticut Corporation:
 - Director and President: Connia Nelson
 - Director and Vice President/Controller: Jean Agostinelli

- State of incorporation - Connecticut
- Agents for service of process
 - CT Corporation System
 - One Corporate Center, Floor 11
 - Hartford, CT 06103-3220

GTE Products of Connecticut Corporation is a subsidiary of GTE Corporation:

- Director and President: John Diercksen
- Director, Vice President and Treasurer: Matthew Ellis
- Director, Vice President and Secretary: William Horton
- State of incorporation: New York
- Agents for service of process
 - CT Corporation System
 - 111 Eighth Avenue
 - New York, NY 10011

GTE Corporation is a subsidiary of Verizon Communications Inc. (91.31% Ownership*):

- Chairman of the Board and Chief Executive Officer: Lowell C. McAdam
- Senior Vice President and Controller: Anthony T. Skiadas
- State of incorporation: Delaware
- Agents for service of process
 - The Corporation trust Company
 - Corporation Trust Center
 - 1209 Orange Street
 - Wilmington, DE 19801

*NYNEX LLC owns 7.24% and Verizon Investments, LLC owns 1.45% of GTE Corporation.

e. The following sets forth the historical ownership history of the Facility and Property. The following clarifies Verizon Communication, Inc.'s relationship to GTEOSI and that Verizon Communications, Inc. has no affiliation, connection or relationship with the Facility or the Property. The information requested in 1.d is not provided for the dissolved companies; otherwise refer to 1.d above for all current companies affiliated in some way with GTEOSI that are referenced below.

- Sylvania Electric Products Inc., a Massachusetts corporation ("Old Sylvania") owned and operated the Facility from 1952 until 1957.
- In April 1957, Old Sylvania transferred its assets and liabilities in the Facility to Sylvania-Corning Nuclear Corporation ("Sylcor"). Sylcor was established in

Delaware in March 1957 as a joint venture between Old Sylvania and Corning Glass Works. The Certificate of Incorporation was filed for Sylcor on March 6, 1957. Sylcor owned and operated the Facility from 1957 until 1960.

- Sepco, Inc. was incorporated in Delaware in December 1958. In February 1959, Sepco, Inc. changed its name to "Sylvania Electric Products Inc." ("New Sylvania"). In February 1959, Old Sylvania transferred all of its stock in Sylcor, and substantially all of its assets and liabilities, to New Sylvania. And, in March 1959, Old Sylvania merged into General Telephone Corporation, which changed its name to General Telephone & Electronics Corporation. New Sylvania was a subsidiary of General Telephone & Electronics Corporation. In December 1960, Sylcor transferred all of its assets and liabilities to New Sylvania and subsequently dissolved. New Sylvania owned and operated the Facility until it closed in 1967.
- In December 1970, New Sylvania changed its name to "GT&E Sylvania Incorporated," which later that month changed its name to "GTE Sylvania Incorporated."
- In May 1977, General Telephone & Electronics Corporation transferred GTE Sylvania Incorporated to one of its subsidiaries, GTE Products Corporation (a Connecticut corporation). In December 1980, GTE Products Corporation (a Connecticut corporation) changed its name to "GTE Products of Connecticut Corporation."
- In January 1980, GTE Products Corporation (a Delaware corporation) merged into GTE Sylvania Incorporated, which changed its name to "GTE Products Corporation" (a Delaware corporation). In July 1982, General Telephone & Electronics Corporation changed its name to "GTE Corporation."
- In August 1992, GTE Products of Connecticut Corporation sold all the stock of GTE Products Corporation (a Delaware corporation) to Osram Acquisition Corporation. In February 1993, Osram Acquisition Corporation merged with and into GTE Products Corporation (a Delaware corporation), which changed its name to "Osram Sylvania Inc."
- In June 2000, GTE Corporation became a subsidiary of Bell Atlantic Corporation ("BAC"), when GTE Corporation merged with Beta Gamma Corporation, a subsidiary of BAC. In September 2000, effective with the merger of Verizon Communications, Inc. into BAC, the name of GTE Corporation's parent was changed from BAC to Verizon Communications Inc. GTE Corporation remains a subsidiary of Verizon Communications Inc.

- GTE Operations Support Incorporated ("GTEOSI") is a subsidiary of GTE Products of Connecticut Corporation. GTEOSI, a Delaware corporation, was incorporated in 1991.
- Verizon, Inc., a Delaware corporation, was incorporated in 1999. Verizon, Inc. was formed to hold the "Verizon" name pending the acquisition of GTE Corporation by Bell Atlantic Corporation in June 2000. In March 2000, Verizon, Inc. changed its name to "Verizon Communications, Inc." In September 2000, Verizon Communications, Inc. merged with and into Bell Atlantic Corporation. Verizon Communications, Inc. (formerly named Verizon, Inc.), was not a successor to any other corporation, never had any subsidiaries, and never owned, operated or had any connection to the Facility.

2. Identify the address, Section, Block and Lot numbers, and the size of each property (hereinafter, "Property" or "Properties") that your Company either presently owns and/or formerly owned within the Site from the date your Company, or any related company had an ownership interest. (See Definitions section for terms.)

Response

In December 1999, GTEOSI purchased the 140 Cantiague Rock Road property (Section 11, Block 499, Lot 100 on the Tax Map of the unincorporated Village of Hicksville in the Town of Oyster Bay, hereafter the "140 Property") solely to conduct an investigation and remediation pursuant to two Voluntary Agreements with the New York State Department of Environmental Conservation ("NYSDEC"). In April 2002, GTEOSI leased 100 Cantiague Rock Road property (Section 11, Block 499, Lot 99 on the Tax Map of the unincorporated Village of Hicksville in the Town of Oyster Bay, hereafter the "100 Property") for this same purpose. In July 2004, GTEOSI purchased 70 Cantiague Rock Road (Section 11, Block 499, Lots 94 and 105 on the Tax Map of the unincorporated Village of Hicksville in the Town of Oyster Bay, hereafter the "70 Property") to continue this work, but could not commence work until 2006, when a lease with Air Techniques, the then current tenant, terminated. Together the Properties are 10.5 acres in size. Neither GTEOSI nor any of its related companies perform any operations or business at any of these three Properties. The Properties are owned or leased solely to allow the site to be remediated.

3. For each Property identified in response to Question 2 in which your Company has and/or had an ownership interest currently or in the past, please identify:

- The date your Company acquired an ownership interest. An ownership interest includes, but is not limited to, fee owner, lessor or lessee, licensee and/or operator;**
- The name and address of all other current and/or previous owners;**

- c. **All individuals or entities that have leased, subleased or otherwise operated at each Property at any time currently or in the past, and identify the dates (month and year) that each such individual or entity began and ended its leasehold interest or its operations;**
- d. **Any portion of any Property which was transferred or sold, and the block and lot number, the date of the transfer or sale, the sale price and the entity that acquired the Property;**
- e. **The relationship, if any, between your Company and each of the individuals and/or other entities identified as having leased or owned or operated at each Property;**
- f. **Your Company's involvement in all operations conducted by each lessee and/or other individual or entity identified in response to Question 3c., above; and**
- g. **For each Property, all documents relevant to your responses to Questions 3a.-3f., above, and provide copies, including, but not limited to, copies of surveys, title search documents, deeds, rent rolls, leases and correspondence.**

Response

- a. Please see response to Question 2.

b-d. With regard to the 100 and 140 Properties (originally referred to as Lot 80 and later re-designated as Lots 99 and 100 respectively), Press Wireless, Inc. owned and operated the property along with the northern part of the 70 Property from around January 6, 1942 until June 24, 1946, after which it transferred the property to Jefferson Standard Life Insurance Company, which subsequently sold the property on December 5, 1951 to Jefferson Standard Broadcasting Company. Old Sylvania purchased the properties from the Jefferson Standard Broadcasting Company on February 28, 1952 for Three Hundred and Fifty Thousand Dollars (\$350,000). On December 9, 1966, New Sylvania executed a contract to sell the 100 and 140 Property to Nanlyn Realty Corp. for Four Hundred and Twenty Five Thousand Dollars (\$425,000). Nanlyn Realty Corp assigned its contract to the Canway Company, Inc., and Canway Company, Inc. acquired the property on March 3, 1967. Canway Company, Inc., immediately conveyed the property to Harris Chasanoff, Michael J. Chasanoff, Allen Chasanoff, and Fred Perlberg, d/b/a Canway Company. Between March 1967 and June 1982, there were various conveyances between Harris Chasanoff, Michael J. Chasanoff, Allen Chasanoff, and Fred Perlberg individually and d/b/a Canway Company, Judith Chasanoff, and the Conway Company, Inc. On September 5, 1978, the 100 Property was conveyed to Nathan Lagan Company, Inc., which then conveyed it to PSPM Realty Corp. on December 3, 1979. On September 14, 1981, PSPM Realty Corp. conveyed the 100 Property to the Nassau County Industrial Development Agency, and Harbor Distributing Corp. entered into a lease to use the property from around 1977 through 1996, after which it acquired the property from Nassau County on June 29, 1996. On January 1, 1992, MDI

Distributors, Inc. executed a lease for the 100 Property and took over operations. MDI Distributors, Inc. leased the property until April 24, 2002, when GTEOSI assumed the lease.

From 1968 through 1979, Eaton Yale and Towne leased the 140 Property. In 1979, Yale Industrial Trucks, a division of Eaton Corporation, took over operations at the 140 Property, and on June 14, 1982, Ventarama Skylight Corp. acquired the property from Canway Company. Ventarama Skylight Corp. occupied the property until around 1991. From around 1988 until around 1991, a division of Ventarama known as American Art Service also occupied the property. In 1991, Gilbert Displays Realty Company acquired the property and leased the property to Gilbert Displays, Inc. until December 9, 1999, at which time GTEOSI purchased the property for Two Million Five Hundred Thousand Dollars (\$2,500,000).

With regard to the 70 Property (originally referred to as Lot 79 and later re-designated as Lot 94), Sylvania-Corning Nuclear Corporation ("Sylcor") acquired the property from George H. Hauser in 1957 for Fifty-Seven Thousand Four Hundred and Twenty Dollars (\$57,420.00). From January 15, 1968 through July 31, 1970, PRD Electronics, a subsidiary of Harris Intertype Corporation, leased a portion of a building on the property. On August 25, 1972, GTE Sylvania Incorporated sold the property and its operating division to Dewiant Corporation for One Million Twenty-Eight Thousand and Five Hundred Dollars (\$1,028,500). In or around April 1974, Barson Composites Corporation purchased the division of Dewiant Corporation then operating at the property and leased approximately half of the building from Dewiant for continued operation. On or around February 1, 1979, Dewiant sold the building and the property to A-T Realty Company. Barson Composites continued to operate there as a tenant until April or May 1982. From the late 1970s until the mid-1980s, Photronics Corp. also occupied a portion of the property. In addition, EDI Products, Inc. was a tenant in the building from approximately September 1978 until approximately February 1979, at which time it was merged into Air Techniques. After the merger, Air Techniques continued to operate on the property as a tenant of A-T Realty Company. In or around December 1985, A-T Realty Company acquired the eastern portion of 70 Cantiague Rock Road, previously designated as Lot 105, from Nassau County. On July 12, 2004, GTEOSI purchased the 70 Property for \$25,250,000. Air Techniques continued to lease and occupy the Property until 2006.

We have the following address information for the above referenced companies and individuals, in addition to the information set forth in response to Question 1:

- George H. Hauser
Last known address: Unknown
- Dewiant Corporation (dissolved)
Current registered address: 24445 Northwestern Hwy. Southfield, MI 48075.
- Air Techniques, Inc. (A-T Realty Company affiliate of Air Techniques)

Current address: 1295 Walt Whitman Road, Melville, NY 11747. Phone: (800) 247-8324 and (516) 433-7676.

- Press Wireless Inc.
Last known address for Press Wireless (circa 1957), Commack or Centereach, New York; street address and phone number are unknown.
- Jefferson Standard Life Insurance Company
Current address: Jefferson-Pilot Corporation 100 North Greene Street, P.O. Box 21008, Greensboro, North Carolina 27420. Phone: (336) 691-3000.
- Jefferson Standard Broadcasting Company
Current address: Jefferson-Pilot Corporation 100 North Greene Street, P.O. Box 21008, Greensboro, North Carolina 27420. Phone: (336) 691-3000.
- Canway Company, Inc.
Last known address for Conway Company (circa 1967): c/o Michael J. Chasanoff, 123 Grove Avenue, Cedarhurst, New York. Phone: (516) 374-9600.
- Harris Chasanoff
Last known address (circa 1967): 123 Grove Avenue, Cedarhurst, New York. Phone: (516) 374-9600.
- Michael J. Chasanoff
Last known address (circa 1967): 123 Grove Avenue, Cedarhurst, New York. Phone: (516) 374-9600.
- Allen Chasanoff
Last known address (circa 1967): 123 Grove Avenue, Cedarhurst, New York. Phone: (516) 374-9600.
- Fred Perlberg
Last known address (circa 1967): 123 Grove Avenue, Cedarhurst, New York. Phone: (516) 374-9600.
- Nathan Lagan Company, Inc.
Last known address: Unknown.
- PSPM Realty Corp.
Last known address: Unknown.

- Nassau County Industrial Development Agency
Current address: Theodore Roosevelt Executive & Legislative Building,
1550 Franklin Ave., Suite 235, Mineola, NY 11501. Phone: (516) 571-1945.
- Harbor Distributing Corp. (aka Magazine Distributors, Inc./dba Hudson News)
Current address: 120 Adams Blvd, Farmingdale, NY 11735
(631) 753-2200
- Ventarama Skylight
Current address: PO Box 527, Syosset, NY 11791. Phone: (516) 931-0226 OR 303 Sunnyside Boulevard, Plainview, NY 11803-1597. Phone: (516) 576-3443.
- Gilbert Displays
Current address: 110 Spagnoli Road, Melville, NY 11747. Phone: (631) 577-1100.

e. GTEOSI has no relationship with any company that owned or operated the Facility. GTEOSI is a subsidiary of GTE Products of Connecticut Corporation. In August 1992, GTE Products of Connecticut Corporation sold the stock of GTE Products Corporation (the predecessor to the entities that owned and operated the Facility) to Osram Acquisition Corporation, which merged thereafter with and into GTE Products Corporation (a Delaware corporation) and changed its name to "Osram Sylvania Inc." GTE Products of Connecticut Corporation provided a contractual indemnity to Osram at the time of sale for environmental contamination associated with the Facility. GTEOSI provides remediation services for discontinued operations of GTE Products of Connecticut Corporation and is the entity which entered into a voluntary agreement with the NYSDEC to remediate the Facility in furtherance of the parent company's indemnity agreement.

f. GTEOSI has no involvement in the operations conducted by any lessee and/or other individual or entity identified in response to Question 3c.

g. Documents relevant to responses to Questions 3a.-3f., are included on the CD of Support Documentation.

4. Provide copies of all maps, building plans, floor plans and/or drawings for each Property identified in response to Question 2., above. Your response to this Question should include, but not be limited to, providing existing and former plumbing, drainage system plans, waste-water discharge areas, tunnel sumps, dry wells, septic systems and waste lagoons in proximity to or within all structures on each Property.

Response

Copies of maps, building plans, floor plans and/or drawings for each Property identified in response to Question 2, are set forth in the reports listed in response to Question 13 and included on the CD of Support Documentation. Otherwise, see response provided by Osram Sylvania.

5. For each Property identified in Question 2., above, describe in detail the manufacturing processes and/or other operations that the Company conducted at each Property, and the years of operations. If those operations changed through the years, describe the nature of all changes, and state the year of each change. If detailed information about the Company's operations is not available, provide, at a minimum, a general description of the nature the business operations at each Property, the years of operation, the type of work conducted, and the number of employees for all the operations.

Response:

- In December 1999, GTEOSI purchased the 140 Property to conduct an investigation and remediation pursuant to two voluntary agreements with the New York State Department of Environmental Conservation ("NYSDEC"). In April 2002, GTEOSI leased the 100 Property for this same purpose. And, in 2006, GTEOSI took control of the 70 Property to continue this work.
- GTEOSI continued its investigation and remedial work pursuant to the terms of the existing Voluntary Agreements until the Army Corp of Engineers took over the investigation in 2006. GTEOSI continues to provide support to the Army Corp of Engineers and monitor their progress.
- Neither GTEOSI nor any of its related companies have used the Properties for any business purpose other than to investigate and remediate the properties.
- For details of GTEOSI's investigation and remediation, please see reports set forth in response to Question 13.

6. With respect to industrial wastes at each Property, list all industrial wastes that were used, stored, generated, handled or received at each Property. Your response to this Question should include, but not be limited to, use, storage, generation and/or handling of trichloroethylene ("TCE"), tetrachloroethylene ("PCE"), 1,1,1-trichloroethane ("1,1,1-TCA") and other chlorinated or non-chlorinated solvents, as well as those substances listed on the chart below. Be as specific as possible in identifying each chemical, and provide, among other things, the chemical name, brand name, and chemical content.

GTEOSI did not conduct any manufacturing on the Properties. GTEOSI's sole connection to the Properties was to investigate and remediate contamination located at, on under and migrating from the Property. All generation, storage and handling of chemicals by GTEOSI was in connection with the remediation of the Property. The objective of the soil remediation work was to remove and properly dispose of soils that were above site cleanup levels for Uranium-238 ("U-238"), Uranium-234 ("U-234"), Thorium -232 ("Th-232"), PCE, TCE, and

nickel ("Ni") and obtain approval for unrestricted future use of the Properties. To the best of GTEOSI's knowledge the following chemicals were used and stored on site and industrial wastes generated by various owners or operators on the Property other than Sylvania, which company is providing its own 104(e) response:

Chemicals Used and Stored on the Properties by other parties:

- a. PCE
 - 1. by Air Techniques
- b. TCE
 - 1. by Hitemco Division – Barson Composites
 - 2. by Ventarama Skylight Corporation
- c. 1,1,1-TCA
 - 1. by Hitemco for spot cleaning of parts
 - 2. by E.D.I. Products for tank degreaser
 - 3. by Air Techniques
- d. Acetone
 - 1. by Hitemco
 - 2. E.D.I. Products
- e. Lacquer Thinners
 - 1. Air Techniques
 - 2. E.D.I. Products
 - 3. Ventarama Skylight Corporation
- f. Honing oil/cutting oil
 - 1. Air Techniques
 - 2. E.D.I. Products

Industrial Wastes Generated on the Properties by other parties:

- a. PCE (Air Techniques)
- b. Spent Degreaser/Degreaser Sludge (TCE - Ventarama Skylight Corporation, Hitemco; PCE – Air Techniques; TCA - E.D.I. Products and Air Techniques)
- c. Lacquer thinners (Air Techniques and Ventarama Skylight Corporation)
- d. Honing oil/cutting oil (Air Techniques)
- e. Waste oil, oil sludge, spent kerosene-based degreasers (Eaton Yale & Towne, Yale Industrial Trucks and Ventarama Skylight Corporation)

7. State when each industrial waste identified in your response to Question 6., above, was used, stored, generated, handled or received, and state the volume of each industrial waste used, stored, generated and/or handled on an annual basis. If you do not have exact volumes, estimate, and explain the basis for your estimate.

Response:

The following provides a summary of GTEOSI's investigation and remediation and identifies the reports that provide greater detail with regard to the specific findings for each phase of the work as to when the various industrial wastes were identified, removed, stored, and otherwise handled.

Non-intrusive activities included:

- A high-resolution ground penetrating radar (GPR) survey was conducted to evaluate the existence of subsurface structures and to assist in identifying subsequent surface and subsurface soil sampling locations (O'Brien & Gere 1998);
- An ultrasonic ranging and data systems (USRADS) radiation survey was performed to define, to the extent practicable, the lateral extent of above-background gamma emitting radioactive materials that could indicate the presence of process residuals, particularly uranium and thorium progeny and to assist in identifying subsurface soil sampling locations (O'Brien & Gere 1998);
- A Site survey was conducted to identify the historic structures and produce a current map of the Site (O'Brien & Gere 2000);
- A subsurface geophysical screening program was performed on the east side of the 140 Property and 100 Property to identify utilities and other subsurface structures (Dillon 2002); and
- Geophysical surveys were performed to identify underground utilities and anomalies (NAEVA 2003 and 2004).

Intrusive investigations included:

- The Initial Investigation (1999) included the installation of 128 soil borings ("SB") [SB-001 through SB-109 (includes 16 borings with multiple designations), SG-001, and BK-001 and BK-002] and the completion of five temporary wells ("TW") (TW-01 through TW-05). Data collected [thorium, uranium, radium, volatile organic compounds ("VOCs"), polychlorinated biphenyls ("PCBs") and metals] was used to evaluate the nature and extent of process residuals related to former Site use. The sampling of existing Site groundwater monitoring wells ("MW") (MW-01 through MW-05) and three up gradient wells ("W") on Nassau County Department of Public Works ("NCDPW") property (W-24, W-24D and W-25) was also performed to evaluate the impact of process residuals and upgradient impacts on the groundwater under the Site (O'Brien & Gere 2000);
- The Supplemental Investigation (2000) was performed to further evaluate areas identified during the Initial Investigation where process residuals (from previous manufacturing operations), consisting of U-238, Th-232, VOCs and nickel, were potentially located. These locations were characterized through the advancement of 68 soil borings [SB-110 through SB-170 (includes several borings with multiple designations) and GT-1 and GT-2] and related soil sample analyses (O'Brien & Gere 2000);
- The Golf Course Driving Range ("GCDR") surface soil sampling program (2001) was conducted to verify that radionuclides were not present (O'Brien & Gere 2001);

- The Excavation Test Program (2001) and a subsurface geophysical screening program were conducted on December 18 and 19, 2001, to better understand subsurface conditions that may affect project implementation, develop protocols for radioactivity field screening, and define the correlation between field instrument readings and soil concentrations of radionuclides (Envirocon 2002);
- The Fall 2002 Investigation (2002) included the advancement of 170 soil borings [U-1 through U-16A, U-16D through U-44, U-46 through U-78, U-79C through U-147 (includes several borings with multiple designations)] for steel sheet pile placement. Additional surface soil samples (GDCR-11 through GDCR-14) were collected at the GCDR to further evaluate radionuclide readings near sample location GCDR-1 (URS 2003a);
- The Interim Drainage Investigation (2003) included the installation of six soil gas survey points and six test pits (TP-1 through TP-6) to characterize the area proposed for use as the interim drainage system, plus the analysis of soil samples collected during the installation of the drainage system (GTEOSI 2003a); and
- The Additional Soil Boring Program (2003) included the advancement of 27 soil boring (U-148 through U-174) to aid in the characterization of potential mixed waste areas (URS 2003b).

Remediation

- Excavation began on April 30, 2003 and was completed on September 23, 2004. Fourteen cells were excavated during this phase (Phase I of the remediation).
- The remediation program was designed in accordance with applicable local, State and Federal guidance and regulations. It defined the requirements for excavating, packaging, managing, transporting and disposing of soils exhibiting impacts of U-238, U-234, Th-232, PCE, TCE, and nickel above the cleanup levels. The details of the remediation program are presented in the *Comprehensive Soil Remediation Work Plan*, January 18, 2002 (Revision 6: August 2003).
- The table set forth below ("Table 3" from the Phase I Soil Remediation Report) lists the excavation cells in order of remediation start date and summarizes their associated statistics (i.e., depth of excavation, amount of material removed, status, etc.). Refer to the *Cell Status Reports* in Appendix B of the Phase I Soil Remediation Report for details on the excavation of the primary 14 cells. (URS and Envirocon, December 2006).

Table 3. Excavation and Backfill Summary

Cell	Excavation			Material Removed		Backfill		Site Cleanup Levels Attained		
	Start	End	Range of Excavation Depth (ft bgs)	Excavated	Lift Liners	Authorization	Completion	Rad	VOCs	HS
1	4/30/03	6/10/03	7-25	10,970,003	505	6/13/03	7/07/03	Not 1	yes	yes
2	6/16/03	8/12/03	14-29	17,331,361	799	8/23/03	9/13/03	yes	yes	yes
13	7/07/03	7/16/03	0-8	5,190,586	235	7/16/03	7/18/03	Not 1	yes	yes
8	7/23/03	9/11/03	5-22	7,896,922	373	9/29/03	10/16/03	yes	yes	yes
4 ¹⁰	8/04/03	8/24/03	1-25	20,346,750	991	10/06/03	1/13/04	yes	Not 3	yes
	9/23/03	10/09/03				10/15/03	10/27/03			
7	8/05/03	10/06/03	0-24	11,689,650	337	10/06/03	10/21/03	yes	yes	yes
14 ¹⁰	10/02/03	12/10/03	0-12	11,224,230	373	10/21/03	3/08/04	yes	yes	yes
						11/04/03				
						12/03/03				
	3/14/04	3/18/04		128,030	7	3/19/04	3/20/04	yes	yes	yes
12	10/09/03	2/03/04	14-28	6,031,090	288	2/11/04	3/05/04	yes	yes	yes
11	10/21/03	2/03/04	16-36	17,346,660	812	2/11/04	3/25/04	yes	yes	yes
5	12/03/03	4/06/04	22-34	8,730,176	404	4/28/04	7/27/04	yes	yes	yes
6	12/11/03	5/12/04	3-42	29,310,936	1,337	3/19/04	7/27/04	yes	yes	yes
10	2/13/04	4/02/04	12-34	15,353,850	728	3/31/04	4/29/04	yes	yes	yes
3	4/12/04	5/11/04	16-24	13,303,000	621	3/18/04	6/09/04	yes	yes	yes
9	3/23/04	9/23/04 ¹¹	0-43	17,173,576	791	8/03/04	9/02/04 ¹¹	Not 1 & 6	yes	Not 7

Notes:

- (1) U-238 Site cleanup level was not attained in Cell 1, subcell U05; Cell 9, subcell E20; and Cell 13, subcell E25.
- (2) Cell 4 was excavated and backfilled in two parts; but was verified as a single Survey Unit for the Adult-Agency Radionuclide Survey and Site Investigation Manual (MARSSIM) evaluation.
- (3) PCE Site cleanup levels were not attained in Cell 4, subcells V16 and W16.
- (4) Cell 14 was excavated, backfilled and verified in two parts; the cell was also evaluated as two Survey Units for the MARSSIM evaluation due to its large size.
- (5) In Cell 9, backfilling was completed before excavation was considered complete as it was necessary to backfill to perform subsurface soil sampling that was considered an excavation-related activity for this cell.
- (6) Tr-232 Site cleanup level was not attained in Cell 9, subcell E21 and uranium in Cell 9, subcell E20.
- (7) Ni Site cleanup level was not attained in Cell 9, subcells E20, G20, and G21.

- Additional soil wastes generated during the Phase I Soil Remediation effort included 64,050 lbs (3 Lift Liners™) associated with the cleaning of sheet pile, 82,460 lbs (4 Lift Liners™) removed from soils beneath the slab of the 100 Building, 511,600 lbs (26 Lift Liners™) of soil generated during the removal of the helical piles used during the excavation in the vicinity of the 100 Building, and 1,864,800 lbs (106 Lift Liners™) of soil generated during investigations subsequent to completion of Phase I soil remediation activities generated late in 2004 through mid-2005. The radioactive sources used in the on-Site gamma spectroscopy system weighed 36.37 lbs (1 Lift Liner™) and were shipped to Alaron, Wampum, PA, where they were encapsulated and then disposed at Chem-Nuclear Systems-Duratec, Barnwell, SC, in June 2006.
- Subsequent to the Phase I soil remediation, which focused on areas east and southeast of the 140 Building, east and southeast of the 100 Building and on areas northeast of the 70 Building, further investigations were undertaken to validate assumptions regarding the non-impacted status of the areas peripheral to the excavations and to evaluate suspected areas of contamination revealed during the Phase I remediation and leach pools identified from historical site records. The results of these investigations are set forth in the following reports:
 - Systematic Subsurface Soil Sampling and Analysis Report – West of the 140 100 Buildings and Southwest of the 100 Building (Survey Unit 01 and Survey Unit 02): Revision 1, issued in November 2005. The field sampling, performed between October 2004 through January 2005, was to investigate unexcavated

areas of the site, and identify and delineate impacts associated with six suspected LPH locations lying within the investigation area.

- *Systematic Subsurface Soil Sampling and Analysis Report - Investigation Beneath the 100 Building (Survey Units 03, 04 and 05)*, issued in November 2005. The field sampling, performed between February and April 2005, was to investigate areas beneath the 100 Building, including suspected LPH and a UST.
 - *Tank Report, UST H, 100 Building, 100 Cantiague Rock Road, Hicksville, New York*, issued in May 2006, reported on the investigation related to the tank reference above.
 - *Systematic Subsurface Soil Sampling and Analysis Report - Investigation Beneath the 140 Building (Survey Unit 06 and Survey Unit 07)*, issued in November 2005. The field sampling, performed between February and April 2005, was to investigate areas under the 140 Building and to identify and delineate impacts from three LPH.
 - *Systematic Subsurface Soil Sampling and Analysis Report - Investigation and Remediation of Soils North of the 140 Building: Revision 1*, issued in October 2005. The field sampling was to investigate a narrow strip of property five feet wide and 500 feet long (east-west), just north of the 140 Building.
 - *Systematic Subsurface Soil Sampling and Analysis Report - Cells 3, 4, 12, 14 and Golf Course Driving Range Subsurface Soil Delineation: Revision 1*, issued in October 2005. The purpose of the field sampling was to delineate residual VOC impacts in the listed areas. At the request of NYSDEC, nickel and beryllium were also analyzed for by the laboratory.
 - *Systematic Subsurface Soil Sampling and Analysis Report - Cell 9 Subsurface Soil Delineation: Revision 1*, issued in October 2005. This investigation was to delineate residual uranium and nickel in cell 9. At the request of NYSDEC, samples were also analyzed for beryllium.
 - *Systematic Subsurface Soil Sampling and Analysis Report - Historic Leach Pools*, issued in March 2006. This investigation analyzed the impacts of numerous leach pools identified in historic site records, which were not covered by the Phase I soil removal work. The field sampling was performed between September 2004 and April 2005.
- Refer to the Phase I Soil Remediation Database Report (URS and Envircon, July 2007) for date and results of the various investigations.

8. Describe the activity or activities in which each industrial waste identified in your response to Question 6., above, was used, stored, handled or received.

Response

See response to Questions 7 and 10.

9. For each substance listed in the chart below, state whether it was detected in sampling performed at the Property at any time. If your answer is Yes, on a separate sheet, provide the identity of the study, the investigator, the date of the study, specifically where on the Property and by whom the sampling was performed.

Substance	Yes or No
Trichloroethylene (TCE)	Yes
Tetrachloroethylene (PCE)	Yes
Cis-1,2-dichloroethylene	Yes
1,1-dichloroethylene	Yes
1,1,1-trichloroethane (1, 1, 1-TCA)	Yes
1,4 Dioxane	Yes
Carbon Tetrachloride	Yes
Chlorobenzene	Yes
Benzene	Yes
1,2 – dichlorobenzene	Yes
Methyl ethyl ketone (2-butanone)	Yes
Bis (2 ethyl hexyl) phthalate and Butyl phthalate	No
Chromium	Yes
Trivalent Chromium	No
Hexavalent Chromium	No
Vinyl Chloride	Yes
Arsenic	Yes
Barium	Yes
Cadmium	Yes
Chloride	Yes
Copper	Yes
Ferrous Iron and Total Iron	Yes
Lead	Yes
Manganese	Yes
Mercury	Yes
Nickel	Yes

Beryllium	Yes
Radionuclides Uranium and Thorium	Yes
Zinc	Yes

See Supplemental Response on Attachment "A".

10. Describe in detail how and where the industrial wastes identified in response to Question 6., above, were disposed. For each disposal location and method, state the nature and quantity of the material disposed of on an annual basis. For those time periods when a precise quantity is not available, provide an estimate and the basis for the estimate. Provide manifests for disposal, if available.

Response

- Majority of the waste (both hazardous and radioactive) were disposed of by Envirocare in Clive, Utah.
- Site personnel tracked waste from the on-site staging area until it departed the rail spur in Hicksville, New York. MHF Logistical Solutions (MHF) was responsible for the transportation of the excavated materials from the Properties to Envirocare. MHF utilized the services of Priority Transport Services, Inc. (Priority Transport) for local transportation of the materials from the Properties to the local rail spur. MHF then tracked the waste during transport to Utah through The New York and Atlantic Railway.
- The State of Utah authorizes waste generators to deliver radioactive wastes to a land disposal facility located within the State of Utah by issuance of Site Access Permit. Site Access Permit Number 0205001352 was issued for the Envirocare of Utah, Inc. (Envirocare) facility. Envirocare disposes of waste material in aboveground disposal cells that are in conformance with specifications created by the USDOE and the United States Environmental Protection Agency (USEPA) and meet Title 40 of the Code of Federal Regulations (CFR) Part 264 and the NRC disposal requirements. There were six waste profiles established and approved for disposal of waste materials at Envirocare. These profiles were:

Profile 1 for low level radioactive waste (LLRW), naturally occurring radioactive material (NORM) [not to exceed NRC Class A Unstable for radioactive materials, not Special Nuclear Material (SNM)];

Profile 2 for mixed waste not requiring treatment;

Profile 3 for mixed waste requiring treatment;

Profile 4 for SNM;

Profile 5 for corrosives (treatment sample); and

Profile 6 for corrosives (drums of liquid waste requiring treatment).

Profiles 5 and 6 were for the same waste stream. Profile 2 was never used.

- Both solid and liquid wastes were generated during the soil remediation work. The solid wastes were classified as NORM, LLRW, SNM, mixed waste, or non-hazardous, non-radioactive waste. Liquid wastes were classified as either hazardous or non-hazardous. Solid waste included debris, soil, or anomalies encountered during excavation that had less than one percent free liquids. Solid wastes were placed in Lift LinerSM, Intermodals, or Sea Land containers for off-Site disposal at Envirocare.
- In May 2004, NYSDEC advised GTEOSI that material transported from the Properties (excluding mixed waste) should be classified as LLRW. For the purpose of disposal, Envirocare confirmed that the classification of NORM was appropriate for material with concentrations below 0.05 percent uranium and thorium and natural U-235 ratio (not regulated by NRC). For other soils (greater than 0.05 percent and/or enriched) the classification of LLRW was appropriate. As a result, two waste profiles were used for radioactive material (non-mixed waste) sent to Envirocare for disposal: NORM for soils with a natural abundance of U-235 [Radioactive Waste Profile Record (RWPR) Number 0840-01] and SNM for soils enriched in U-235 (RWPR Number 0840-04).
- Under Part 381, Low-Level Radioactive Waste (LLRW) manifests must be filed with NYSDEC by the waste transporter, or their designee, for highway transport into, within, or through New York State regardless of the specific activity of the waste. Priority Transport Service, Inc. (Priority Transport) held the 381 Permit # 4A-288 under which LLRW was transported for disposal. On April 7, 2004, GTEOSI filed a letter with NYSDEC describing its plan for compliance with 6 NYCRR Part 381 "Low-Level Radioactive Waste Transport Permit and Manifest System". On April 29, 2004 (revised April 30, 2004), GTEOSI requested a variance from the 6 NYCRR Part 381 regulations on behalf of Priority Transport. The variance was formally granted by NYSDEC on June 10, 2004. This variance removed the requirement to complete the NRC LLRW manifest forms (540/541) for each shipment from the Site to prevent duplicative paperwork. Rather forms were generally filed on an annual basis.
- Radioactive sources used in the on-Site gamma spectroscopy system weighed 36.37 lbs (1 Lift LinerTM) and were shipped to Alaron, Wampum, PA, where they were encapsulated and then disposed at Chem-Nuclear Systems-Duratec, Barnwell, SC, in June 2006.
- Carbon canisters were used in the on-site air handling system. Prior to replacement, the carbon units were scanned for radionuclides and VOCs. Composite samples were collected and analyzed for radionuclides, TCLP VOCs, TCLP SVOCs, TCLP metals, TCLP pesticides, TCLP herbicides and general chemistry parameters (pH, flashpoint, percent moisture, reactive cyanide, and reactive sulfide). Following receipt and evaluation of the sample results, a non-hazardous, non-radioactive profile was completed and arrangements were made for disposal. Recovery Environmental Services, Inc. of

Montague, New Jersey serviced the carbon canisters. A vacuum truck was used to extract the carbon from the canisters and place into box containers. Auchter Industrial Vac Service, Inc. was used to transport the boxes of carbon via truck to Vineland, New Jersey. Non-hazardous waste manifests were generated for shipping and disposal purposes. The carbon was disposed of by Casie Ecology Oil Salvage, Inc. (Casie-Protank) in Vineland, New Jersey.

- Mixed waste contained both a hazardous component as defined in 40 CFR Part 261 and radioactive component as defined by 42 U.S.C. Section 201 et seq. (AEA 1954). Some radiologically impacted soils from the Site were also impacted with VOCs and Ni. Using the rules as set forth in 40 CFR 261 and approved remedial guidelines, approximately 1,742,786 lbs (871 tons) of mixed waste were generated in 2003 and 511,930 lbs (256 tons) were generated in 2004. Of this, 2,254,716 lbs of excavated soils were characteristically hazardous waste for PCE and were assigned the USEPA RCRA code D039. Further, 3,820 lbs of waste was classified as corrosive hazardous waste and were classified as USEPA RCRA Code D002, as described in 40 CFR 261.22. In compliance with applicable USDOT regulations, these wastes were transported to Envirocare, treated by Envirocare under a RCRA Part B permit and were disposed of in Envirocare's mixed waste landfill.
- Liquid waste includes non-hazardous wastewater, methanol laboratory waste, and caustic liquid.
 - A 10,000-gallon Baker Tank was used to store decontamination water generated from drilling and sampling activities. When the tank volume approached 90 percent capacity, samples were collected and analyzed for radionuclides, VOCs, SVOCs, TAL metals, and pH. Following evaluation of the sample results, arrangements were made for disposal. Russell Reid was contracted to pump out the water from the tank and transport it to the Nassau County Bay Park Scavenger Waste Disposal Facility.
 - The wastewater generated from the on-site analytical service consisted of less than five percent methanol and part per billion (ppb) levels of VOCs. The laboratory analysis indicated the mixture was non-flammable, neutral pH, and non-hazardous (40 CFR Parts 260- 265). Approximately 500 gallons of the liquid laboratory waste was consolidated with the excavated soils and shipped to Envirocare for disposal.
 - On July 1, 2003, a UST was encountered during excavation of Cell 2 (URS 2004a). The UST contained approximately 875 gallons of liquid and sludge. The contents were sampled and tested individually for radionuclides, total VOCs, TCLP VOCs, TCLP SVOCs, TCLP metals, TCLP herbicides and pesticides, pH, reactivity, ignitability, alkalinity and percent moisture. The contents were found to be corrosive (pH of 13.3 and 12.6, respectively). PCE was reported in both the sludge [11,000 micrograms per kilogram ($\mu\text{g/kg}$)] and the liquid [38,000

micrograms per liter ($\mu\text{g/L}$)). The sludge contained U-238, U-234, and U-235 at 24,500, 23,500, and 1,290 pCi/g, respectively, as well as Th-232 at 111 pCi/g. The liquid contained U-238, U-234, U-235, and Th-232 at 235,000, 231,000, 13,000, and 3,400 picoCuries per liter (pCi/L), respectively. Based on these analyses, the contents were solidified by adding Liqui-Sorb® 200; the tank was double wrapped in plastic, placed into a shipping container, and transported by railcar for disposal at Envirocare.

- On March 1, 2004, during the excavation of Cell 10, a 3,400-gallon abandoned UST was encountered (URS 2004d). The tank was in good condition with no visible punctures or signs of leakage. The tank contained approximately 14 inches of unknown product consisting of 6 inches of liquid overlying 8 inches of sludge. The tank contents were sampled for radionuclides, total VOCs, TCLP VOCs, TCLP SVOCs, TCLP metals, TCLP herbicides and pesticides, ignitability, reactive cyanide and sulfide, corrosivity, and pH. The liquid was found to be corrosive (pH of 12.9). The sludge contained U-238, U-234, and U-235 at 18,600, 18,200 and 910 pCi/g, respectively. Approximately 400 gallons of liquid were pumped out of the UST and into eight USDOT approved 55-gallon poly drums. The drums were overpacked into two B25 containers (USDOT specification steel-walled boxes). MHF-LS, via Priority Transport, shipped the 3,820 lbs of waste by truck to Envirocare. This waste was manifested (NYG 4026726) as D002 based on its high pH. Prior to disposal, the waste was treated (neutralized) at Envirocare. Subsequently, the UST was sectioned into pieces and placed in Lift Liners™ for disposal at Envirocare (URS 2004d). The sludge was mixed inside the UST with Liqui-Sorb® 200, manufactured by Chemdal Corporation, to solidify the contents. The UST was then cut apart exposing the solidified content. The UST was sized into pieces approximately 3 foot by 3 foot. The UST pieces and the solidified content were then mixed with excavated soil from Cell 10, placed into Lift Liner™, and shipped to Envirocare for disposal.
- Three USTs associated with fueling operations were taken out of service and removed from the 100 Property in 2003, prior to remediation of the area (GTEOSI 2003c). Sludge, scale, diesel fuel and metal chips were transported by Muller Environmental for disposal by Philips Services in Bayshore, New York. Soils around the USTs and piping were screened and placed in Lift Liners™ for disposal at Envirocare. The tanks were transported to Mid Island Salvage Corp. of Deer Park, New York for disposal.
- Documentation was generated for each waste shipment, including the Railcar Inspection Form, Transport Vehicle Release Checklist (a daily checklist for trucks and packages), straight bill of lading, NRC 741 form for SNM material and an NRC 540 and 541 form for LLRW. A New York Hazardous Waste Manifest was completed for mixed waste shipments. Electronic files of the NRC 540, 541, and 741 forms and New York Hazardous Waste Manifests were sent to Envirocare. Upon receipt and acceptance of the

shipment, Envirocare signed the original manifest and mailed a copy of the NRC 540 form to GTEOSI. Similarly, upon placement of the waste into the landfill, the Certificate of Disposal (with the date of disposal) was sent to GTEOSI. Documentation received from Envirocare was filed with the appropriate manifests on Site. Envirocare also sent copies of New York Hazardous Waste Manifests to the States of Utah and New York.

- The Low-Level Radioactive Waste Report Forms and the Annual Hazardous Waste Report forms filed with NYSERDA and NYSDEC respectively set forth the amount of waste generated through the remediation on an annual basis and shipped to Envirocare in Clive, Utah.
- Archived soil and groundwater samples, discussed in response to Question 11, were staged on site until December 2006. The samples were ultimately emptied into Lift Liners along with cut up and chipped storage containers and sent to Envirocare for disposal. Sixteen Lift Liners were filled and transported off site on November 20, 2006. Vials and jars were placed in seven Lab Pack 55 gallon drums and shipped by truck to Envirocare on December 4, 2006. A total of 206, 620 pounds of soil and groundwater samples were shipped. The shipping manifests and certificates of disposal are located in the URS and Envirocon, Inc. 2007c. *Archived Sample Disposal Report*.
- For documentation, see reports and manifests on the CD of Support Documentatoin.

11. Describe where drummed wastes and/or contaminated soils were staged on each Property. If drums and/or contaminated soils were buried on each Property, identify where they were buried. If buried drums and/or contaminated soils were excavated and removed, identify the locations of the drum and/or soil removal. Provide an inventory of the number of drums, the volume of the drums and/or soil, the contents of the drums and/or soil, and the disposal site for such drums and soil. For drums disposed of off the Property, provide manifests for their disposal.

Response

- Excavation work in connection with the comprehensive soil remediation by GTEOSI was performed, to the extent possible, in a manner to segregate clean and impacted materials. Soils with identified impacts were placed directly into Lift Liners at the point of excavation within the various cell excavation enclosures. The Lift Liners were staged to await off-site transportation to the rail siding where they were loaded directly onto railcars for transport to the disposal facility. Materials that were anticipated to be clean were segregated and stockpiled. The stockpiles were then subject to confirmatory sampling and analysis to verify the soils met target cleanup levels. Once verification was complete, the clean soils were moved to an outdoor staging area and covered. Upon completion of the excavation, the clean material was used as backfill material. With regard to the Lift Liners, once full the Lift Liners were staged in a designated area on the 140 Property, isolated by fencing and designated by signs to limit access until transported

off-site. (See the *Comprehensive Soil Remediation Work Plan*, January 18, 2002 (Revision 6: August 2003).

- Archived soil and groundwater samples were stored in Building 140 up and until December 4, 2006. Archived samples were shipped to Envirocare in two batches, one sent on November 7, 2006 and the second on December 4, 2006. (Note – after the last shipment of excavated soils, but before the shipment of archived samples, Envirocare changed its name to EnergySolutions.) (See URS and Envirocon, Inc. 2007c. *Archived Sample Disposal Report*.)
- In December 1986, prior to GTEOSI entering into a voluntary investigation or remediation agreements with NYSDEC or taking title to, or leasing, any of the Properties, Air Techniques discovered a cache of buried drums while undertaking an expansion of its manufacturing building located on the 70 Property. A-T Realty contacted the Nassau county Department of Health (NCDOH), which sampled the drums and found hazardous substances including PCE, arsenic and low levels of PCBs. The NCDOH did not test for uranium, but informed the NYSDEC of its results in February 1987. In April of 1987, separate testing of the drum contents (by Stauffer Chemical, Co, the name identified on the barrels) revealed the contents contained .05% uranium. A-T retained ERM-Northeast (ERM) to conduct a site investigation and to remove the drums. Approximately 60 drums were removed at depths from 0 to 12 feet from two identified “drum fields.” Approximately 90 cubic yards of soil was also removed. A post excavation geophysical survey indicated that all metallic debris had been removed. Five test borings were performed in the excavated area. Samples from 15-27 feet demonstrated elevated PCE and PCBs, but samples from 35 – 37 feet had negligible results. Based on the results ERM determined the 12 foot zone (within a 6x12 foot area) was an isolated hot spot with approximately 27 gallons of PCE absorbed into the soil. Because this area was under a foundation, a liner was placed over the area to prevent any filtration and the building was intended to act as a cap to prevent leaching of any “residual contamination.” Air Techniques handled the removal and disposal and would have any documentation relating to manifests.
- During GTEOSI’s remediation of the Properties, the term anomaly was used to refer to unanticipated historic features discovered during the remediation that was not part of a debris field. Examples of anomalies included USTs and 55 gallon drum remnants or other artifacts that could possibly be conceived as part of the original Facility’s processing system. These findings were, sampled and surveyed where possible and documented in the *Cell Status Reports* located in Appendix B of the Phase I Soil Remediation Report. (URS and Envirocon, December 2006). Appendix B, Table 2 provides within each Cell Status Report the description, location, and sample results for each anomaly. Anomalies were sized to fit within a Lift Liner or other acceptable container and shipped to Envirocare for disposal with the other waste excavated from the site.

12. State the number and the locations of the underground storage tanks ("UST") at each Property from the 1950s to the present. For each UST, state whether it was used for storage of product, storage or treatment of hazardous waste and/or industrial waste. State whether the USTs were in compliance with the hazardous waste regulations set forth in 40 C.F.R. Part 264/265. If any USTs contained petroleum product, state whether they were in compliance with the regulations at 40 C.F.R. Part 280.

Response

- a. During remedial excavation, two previously unregistered USTs were identified: one UST was found in Cell 2 and one in Cell 10. The removal of these two USTs was reported in *Tank Report, Cell 2, 140 Cantiague Rock Road, Hicksville, New York* (URS 2004a) and *UST Report, Cell 10, 100 Cantiague Rock Road, Hicksville, New York* (URS 2004d).
 - i. Sylvania utilized an underground storage tank located at the south side of the burning building for solvent and caustic wastes. On July 1, 2003, an area south of where the burning building was located, within cell 2, was excavated. A 6,000 gallon historic tank was discovered in subcells V10 and W10 approximately 4 feet below grade, measuring approximately 7 feet in diameter and 19 feet long. The tank contained 875 gallons of liquid and sludge. PCE, uranium (U-238, U234, and U-235) and thorium (TH-232) were reported in both the sludge and the liquid. Soil sampling under the tank revealed .119 mg/Kg of TCE and 2.181 mg/kg of PCE in soils. On-site gamma spectroscopy indicated elevated activity for both natural uranium and natural thorium. No elevated levels of BTEX compounds, MTBE, metals or semivolatiles were detected. GTEOSI advised the New York State Department of Environmental Conservation (NYSDEC) of the existence of the tank and sought approval for the tank closure. The tank was registered and deregistered with Nassau County, the contents of the tank were solidified and the tank was sent to Utah for disposal at Envirocare.
 - ii. On March 1, 2004, during the excavation of Cell 10 a 3,400 gallon tank was unearthed in subcells I20 and J20. The UST was in good condition with no visible punctures or signs of leakage. The liquid and sludge were sampled and the liquid was found to be corrosive and the sludge to contain uranium (U-238, U-234, and U-235). The liquid was pumped out of the UST into drums and disposed at Envirocare in Utah. The sludge was solidified inside the tank and shipped with the tank carcass to Envircare in Utah for disposal.
- b. Three USTs associated with fueling operations also were taken out of service and removed from the 100 Property in May 2003, prior to remediation of the area (GTEOSI 2003c). Specifically, there were 2 gasoline USTs each with a capacity of 2,000 gallons and one diesel UST with a capacity of 10,000 gallons removed from service. The tanks were used by MDI Distributors, the contents were vacuumed out and disposed of under

MDI's EPA Id number, and appropriate paperwork was filled out and submitted to the Town of Oyster Bay and the Fire Marshall for permitting by GTEOSI and subsequent removal of the tanks. Closure reports for the tanks were prepared. No impacts or evidence of a release were detected on the concrete pad above the tanks or in the soil surrounding the tanks. The tanks were reported indirect correspondence with the agency and in the *Phase I Soil Remediation Report* (URS and Envirocon, Inc. 2006e).

- c. On September 5, 2003, tank remnants were located in Cell 4, subcell U16, on the eastern portion of the 100 Property. The tank was crushed when encountered, but sampling under the tank carcass did not reveal any TCE or PCE contamination. The tank was reported in the *Phase I Soil Remediation Report* (URS and Envirocon, Inc. 2006e).
- d. In May 2005, "UST H" was encountered during the GTEOSI remediation. The UST was positioned in an east-west orientation under the 100 Building within subcell L17, measured approximately 5 feet in diameter and 15 feet in length, with an approximate capacity of 2,500 gallons. Samples of liquid and sludge in the tank indicated the presence of PCE, TCE, cis-1,2-dichloroethene, xylene, 2-butanone and acetone. The sample also tested positive for uranium and thorium. An emulsifier was added to the tank to solidify the contents. No contamination was identified outside or surrounding the tank. The UST was registered with the New York State Department of Health and remains in place under Building 100. The removal of this tank was reported in *Tank Report, UST H, 100 Building, 100 Cantiague Rock Road, Hicksville, New York* (URS and Envirocon, Inc., 2006b).

13. Provide a summary listing of environmental assessments or studies, investigations, removal actions, remedial activities, or any other environmental work conducted by your Company or by any other party on your Company's behalf relating to industrial wastes released at or from each Property and/or the Site. If any copies of the records requested in this Question are available electronically, kindly submit your answer to this Question on a hard drive or discs.

ERM-Northeast, 1987. Remedial Excavation and Subsurface Investigation, Air Techniques, Inc., August, 1987.

O'Brien & Gere, 1998a. Voluntary Cleanup Program Application - Exhibit B, Investigation Work Plan, March 1998, (Revised May 1998) (Revised by letter dated July 31, 1998).

O'Brien & Gere, 1998b. Ground Penetration Radar Survey and Exterior Radiation Survey Results, Hicksville, NY.

O'Brien & Gere, 2000a. History Report, Former Sylvania Electric Products Incorporated Facility, Cantiague Rock Road, Hicksville, New York, July 2000.

O'Brien & Gere, 2000b. Investigative Report, Former Sylvania Electric Products, Inc. Facility, Hicksville, New York, January 2000 (Revision 2: December 2000).

O'Brien & Gere, 2001a. Supplemental Investigative Report, Former Sylvania Electric Products, Inc. Facility, Cantiague Rock Road, Hicksville, New York, March 2001 (Revision 1: July 2001).

O'Brien & Gere, 2001b. August 2001 Groundwater Sampling, Former Sylvania Electric Products, Inc. Facility, Cantiague Rock Road, Hicksville, New York, September 2001.

GTEOSI, 2001. Letter Report, Surface Soil Sampling, Golf Course Driving Range to Robert Stewart. December 21, 2001.

Dillon Consulting Limited, 2002. Geophysical Surveys, Former GTE Sylvania Facility, Hicksville, New York, January, 2002.

URS, 2002. Monitoring Well Installation and Ground Water Investigation, Former Sylvania Electric Products, Incorporated, Facility, Cantiague Rock Road, Hicksville, New York, February 28, 2002.

Envirocon, Inc., 2002. Excavation Test Program Summary Report, Sylvania Electric Products Facility, Hicksville, New York, March 6, 2002.

URS, 2003a. Soils Report Fall 2002, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, March 2003.

Malcom Pirnie, Inc. 2003. Groundwater Investigation Report, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, Voluntary Cleanup Program Site No. V00089-1, March 2003.

URS, 2003b. Asbestos Project/Air Monitoring During Asbestos Abatement at the Building Located at 140 Cantiague Rock Road, Hicksville, NY, June 2, 2003.

URS, et. al. 2003. Comprehensive Soil Remediation Program Work Plan Former Sylvania Electric Products Facility, GTE Operations Support Incorporated, (Revision 5, June 2003).

URS, 2003c. Asbestos Project/Air Monitoring During Asbestos Abatement – Phase II at 140 Cantiague Rock Road, Hicksville, NY, October 31, 2003.

GTEOSI, 2003a. Soil Investigation in Support of the Interim Drainage System Installation, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, July 9, 2003.

URS, 2003d. Additional Soil Borings, April 2003, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, July 29, 2003.

NAEVA Geophysics Inc. (NAEVA), 2003. Results of Geophysical Investigation, Portion of a Former Sylvania Electric Products Facility, 70, 100, and 140 Cantiague Rock Road Hicksville, New York, July 12, 13, and 17, 2003.

GTEOSI, 2003c. USTs Removed from Service, 100 Cantiague Rock Road, Hicksville, New York, September 15, 2003.

Technical Memorandum, 2004. Cell 11: Analytical Results of the Tube, March 18, 2004.

GTEOSI, 2004. Cell 11: Analytical Results of the Tube. Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, March 18, 2004.

NAEVA, 2004. Results of Geophysical Investigation, Former Sylvania Electric Products Facility, 100-140 Cantiague Rock Road, Hicksville, New York, September 20-24 and 28, 2004.

URS, 2004a. Tank Report, Cell 2, 140 Cantiague Rock Road, Hicksville, New York. February 16, 2004.

URS, 2004b. UST Report, Cell 10, 100 Cantiague Rock Road, Hicksville, New York. July 12, 2004.

Vibra-Tech Engineers, Inc., 2004. Vibration Monitoring Report for 140 Cantiague Rock Road, Hicksville, NY, December 13, 2004.

Malcom Pirnie, Inc. 2005. Groundwater Interpretation Report, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, Voluntary Cleanup Program Site No. V00089-1, July 2005.

URS and Envirocon, Inc., 2005a. Systematic Subsurface Soil Sampling and Analysis Report – Investigation and Remediation of Soils North of the 140 Building: Revision 1, October 2005.

URS and Envirocon, Inc., 2005b. Systematic Subsurface Soil Sampling and Analysis Report – Cell 9 Subsurface Soil Delineation: Revision 1. October 2005.

URS and Envirocon, Inc., 2005c. Systematic Subsurface Soil Sampling and Analysis Report – Cells 3, 4, 12, 14 and Golf Course Driving Range Subsurface Soil Delineation: Revision 1, October 2005.

URS and Envirocon, Inc., 2005d. Subsurface Soil Sampling and Analysis Report – West of the 140 100 Buildings and Southwest of the 100 Building (Survey Unit 01 and Survey Unit 02): Revision 1, November 2005.

URS and Envirocon, Inc. 2005e. Systematic Subsurface Soil Sampling and Analysis Report - Investigation Beneath the 100 Building (Survey Units 03, 04 and 05), November 2005.

URS and Envirocon, Inc., 2005f. Systematic Subsurface Soil Sampling and Analysis Report – Investigation Beneath the 140 Building (Survey Unit 06 and Survey Unit 07), November 2005.

URS and Envirocon, Inc., 2006a. Systematic Subsurface Soil Sampling and Analysis Report – Historic Leach Pools, March 2006.

URS and Envirocon, Inc., 2006b. Tank Report, UST H, 100 Building, 100 Cantiague Rock Road, Hicksville, New York, May 2006.

URS and Envirocon, Inc., 2006c. Potential Transport of Uranium from Subsurface Soils in Cell 1 to the Point of Interest, October 2006.

URS and Envirocon, Inc. 2006d. Potential Transport of Uranium from Subsurface Soils in Cell 6 to the Point of Interest, November 2006.

URS and Envirocon, Inc. 2006e. Phase I Soil Remediation Report, December 2006.

URS and Envirocon, Inc., 2007a. Lithologic Evaluation Report, 2007.

Malcom Pirnie, Inc. 2007. Groundwater Investigation Report, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, Voluntary Cleanup Program Site No. V00089-1, January 2007.

URS and Envirocon, Inc., 2007b. Phase I Soil Remediation Report, July 2007.

URS and Envirocon, Inc. 2007c. Archived Sample Disposal Report, August 2007.

Professional Radiation Consulting, Inc. and Envirocon, Inc. 2007, Radiological Status Survey Results Buildings 100 and 140 Cantiague Rock Road, December 2007.

Malcom Pirnie, Inc. 2008a. Data Report P102, P104, P110, P112, P113, and P114, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, Voluntary Cleanup Program Site No. V00089-1, January 2008.

Malcom Pirnie, Inc. 2008b. Data Report P103, P107, and P108, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, Voluntary Cleanup Program Site No. V00089-1, February 2008.

Malcom Pirnie, Inc. 2008c. Data Report P118, MWP 110-355, MWP110-440, MWP 114-170 and MWP 114-290, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, Voluntary Cleanup Program Site No. V00089-1, April 2008.

Malcom Pirnie, Inc. 2008d. Data Report P119 and P120, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, Voluntary Cleanup Program Site No. V00089-1, November 2009.

Malcom Pirnie, Inc. 2011. Groundwater Remedial Investigation Report, Former Sylvania Electric Products Incorporated Facility, Hicksville, New York, Voluntary Cleanup Program Site No. V00089-1, January 2011.

The above listed reports are included on the CD of Support Documentation. Copies of all reports generated during the investigation are available at the Hicksville Public Library, were previously provided to the Army Corp. of Engineers, and were reviewed by Lockheed Martin for U.S. EPA in your preparation of the Supplemental Remedial Investigation Technical Memorandum for the New Cassel/Hicksville Ground Water Contamination Site Nassau County, New York Technical Memorandum SERAS 0-144.

14. Describe in detail any knowledge your Company has about intentional or unintentional disposal of industrial wastes at each Property identified in response to Question 2., above. Your response should include instances in which industrial wastes were spilled or otherwise disposed of into lagoons, historic leach pools, or into or onto the ground from septic systems, pipes, drains, drums, tanks, or by any other means. Provide copies of all documents relevant to your response.

Response

During GTEOSI's ownership and operation on the Properties there was no intentional or unintentional disposal of industrial waste at any of the Properties.

15. Identify all leaks, spills, or releases of any kind of any industrial wastes (including, but not limited to, TCE and PCE or other chlorinated or non-chlorinated solvents or wastes containing such solvents) into the environment that have occurred, or may have occurred, at or from each Property, including any leaks or releases from drums and other containers. Provide copies of all documents relevant to your response.

Response

1. During GTEOSI's ownership and operation on the Properties there were no leaks or spills by GTEOSI of any industrial wastes (including, but not limited to, TCE and PCE or other chlorinated or non-chlorinated solvents or wastes containing such solvents) at or from each Property, including neither leaks nor releases from drums and other containers.
2. Any release at or from the Properties during GTEOSI's ownership and operation thereof would have been associated with a continuing release of contamination previously released into soils.

16. Explain whether any repairs or construction, were implemented to address any leaks, spills, releases or threats of releases of any kind, the nature of the work and the dates of any such work.

Response

Aside from the previously described remediation, there were no specific repairs or construction projects implemented to address any leaks, spills, releases or threats of releases at, on under or around the Properties by GTEOSI.

17. Provide copies of all insurance policies held and indemnification agreements entered into by the Company which may potentially indemnify the Company against any liability which it may be found to have under CERCLA for releases and threatened releases of hazardous substances at and from the Property. In response to this request, please provide not only those insurance policies and agreements which currently are in effect, but also those that were in effect during any period of time that the Company conducted operations at, or held a property interest in the Property.

Please see CD of Support Documentation.

18. State the names, telephone numbers and present or last known addresses of all individuals whom you have reason to believe may have knowledge, information or documents regarding the use, storage, generation, disposal of or handling of industrial wastes at the Site, the transportation of such materials to the Site, or the identity of any companies whose material was treated or disposed of at the Site.

Response

1. Jean Agostonelli, Verizon Corporate Services Group, Inc., One Verizon Way, Basking Ridge, NJ 07920, (908) 559-3687.
2. Elie A. Ghannoum, Verizon Corporate Services Group, Inc., One Verizon Way, Basking Ridge, NJ 07920.
3. Pam Cox, Verizon Corporate Services Group, Inc., One Verizon Way, Basking Ridge, NJ 07920.
4. Alvin E. Ludwig, Esq., 5014 Victor Court, Missoula, MT 59803, (406) 251-7938.
5. Lucky Tabor, Envirocon, 1940 Jackson Road, Pasadena, TX 77506, (713) 534-6200.
6. Robert Brathovde, URS, 458 Harnell Avenue, Oakhurst, NJ 07755, (732) 213-4228.
7. Mike Dowger, 301 Jones Court, Exton, PA 19341, (610) 363-6572.
8. Tom Spatafora, Blue Water, 1610 New Highway, Farmingdale, NY 11735, (631) 249-1872.

9. Dan St. Germaine, Malcolm Pirnie, 17-17 Route 208 North, Fair Lawn, NJ 07410, (201) 398-4381.
10. Jeff Banikowski, O'Brien & Gere, 435 New Karner Road, Albany, NY 12205, (518) 452-9392.
11. Carol J. Scholl, URS Corporation, 100 South Wacker Dr., Suite 500, Chicago, IL 60606, (312) 939-1000.
12. Shane Brightwell, MS, CHP, President, Professional Radiation Consulting, Inc., 7 Balmoral Drive Pittstown, NJ 08867, (908) 730-9224.
13. John Ifkovits, Senior Geologist, ARCADIS U.S., Inc., 17-17 Route 208 North, Fair Lawn, NJ 07410, (201) 797.7400.
14. Marzi Sharfaei, PG, CPG, PHG, Principal Hydrogeologist, ARCADIS U.S., Inc., 2800 West Higgins Road, 10th Floor, Hoffman Estates, Illinois 60169, (847) 805-1011.
15. Epperson, Kelly L., GSBankUSA, (current address unknown), (801) 884-1521.
16. Tim Mock, TTA, 969 Oakridge Turnpike, #252, Oakridge, TN 37830, (865) 740-6870.

19. If you have information or documents which may help EPA identify other companies that conducted operations, owned property, or were responsible for the handling, use, storage, treatment, or disposal of industrial wastes that potentially contributed, to contamination of the Site, please provide that information and those documents, and identify the source(s) of your information.

Response

1. It is GTEOSI's position that the United States Government is responsible for all releases of hazardous contamination, both onsite and offsite, from the former Sylvania facility. The Facility would not have existed if AEC had not sought out Sylvania for its metallurgical expertise and requested that it purchase and build the Facility. Sylvania purchased the properties in 1952 at the direct request of the Atomic Energy Commission ("AEC") for the sole purpose of conducting research and development of nuclear fuel slugs, nuclear targets, and nuclear fuel elements in direct support of AEC's nuclear weapons program and nuclear reactor power programs. Over 99% of Sylvania's operations at the site were conducted to support AEC's nuclear weapons production programs at Hanford, Washington and Savannah River, South Carolina. The AEC controlled all aspects of the operation at the Facility by contract, regulation, and/or licenses, including the directed use of precise nuclear isotopes, use of the metal degreaser

solvent PCE, use of nickel for the cladding of the nuclear fuel elements, all listed in response to questions 5, 6, 8, 10, and 11. Sylvania could not change nuclear materials, operations, use of solvents, or waste disposal methods without AEC approval. The Department of Energy ("DOE") is the successor federal agency to the old AEC and remains legally responsible for contamination from the site. The United States Corps of Engineers has responsibility for executing remedial action at the site under the Formerly Utilized Sites Remedial Action program.

It is important to note that Sylvania never owned the nuclear materials processed at the plant. The AEC was an "owner" and "operator" of facilities on the Hicksville Properties within the meaning of CERCLA, including all nuclear materials and all nuclear equipment. AEC was also the explicit "owner" of all nuclear waste and residues used, stored, and generated at the site; arranged for "transportation" and "disposal" of such materials within the meaning of those terms under CERCLA; and continues to own those materials to this date. The AEC controlled all aspects of the Facility operations pursuant to contracts and licenses, most importantly AEC Contract No. (30-1)-1293 commonly referred to "Contract 1293" and AEC licenses, including special nuclear licenses SNM 141 and SNM 82, and Source Material License SML Nos. C-3416 and C-3700. Sylvania ceased operations in 1966, and by 1967 AEC had released all of the Hicksville properties for unrestricted use after directing inspections of the parcels and determining that they had been decontaminated in accordance with AEC requirements.

In 1979, DOE found contamination in surface and subsurface soil at the Hicksville Site, but took no remedial actions. Both DOE and NRC reinvestigated the Site in the 1990s and confirmed contamination at the Site, but failed to cleanup and remediate the Hicksville site. As explained in greater detail in GTEOSI's response to the 104(e) request for information, GTEOSI voluntarily agreed with the State of New York to perform response actions at the site at a cost of over \$214 Million dollars, and GTEOSI is seeking reimbursement from the Federal Government for these costs. The Corps of Engineers now has responsibility under FUSRAP for further remedial action.

The documentary basis for GTEOSI's position that the Federal Government is referenced in its CERCLA demand letter of October 22, 2007, filed with the Department of Justice (included on the CD of Supplemental Documentation). While the Federal Government has all of the documents referenced in the demand letter, GTEOSI can provide the documents referenced in that letter as well as to Corps of Engineers index of over 2000 pages listing documents pertaining to the Hicksville site that are in the Federal Government's possession.

2. During Malcolm Pirnie's assessment of groundwater in and around the Properties, potential source areas were identified from historical documentation of operations and soil data. The evaluation of this data shows that there are several potential source areas where chlorinated volatile organic compounds (CVOC) impacted soil around the 100 and 140 Properties. The report additionally identified *other* source areas surrounding the

Properties. Specifically, the 2005 report identified the following other potential source areas:

- The former GIC site is a source of CVOC contamination
 - PCE, TCE, and 1,2-DCB impacts in Area A (associated with the former 2,000 gal solvent storage tank) on the north side of GI including the former discharge basin/waste lagoon (Figure 4-2),
 - PCE, TCE, and 1,2-DCB impacts in Area B (associated with the former 1,000 gal solvent storage tank) on the southwest side of GI (Figure 4-2), and
 - PCE, TCE and 1,2-DCB impacts in Area C (associated with the tunnel sump) on the east side of GI (Figure 4-2).
 - The data additionally shows that hydrocarbons were released and detected in soils and groundwater concurrent with the CVOCs at areas A, B, and C on the GI site.
 - The groundwater quality data (Figure 4-3) shows that there are at least three additional potential source areas of CVOC contamination located in the vicinity of the Properties:
 - One potential source of PCE is in the northwest corner of GI and/or the southwest corner of the 70 Property;
 - A second potential source area is on the Hercules property;
 - Groundwater quality data collected beneath the Properties indicates a third potential source areas of PCE and TCE located upgradient of the Properties. This is supported by the presence of trichloroethane (TCA), which is not a degradation product of PCE, was never used at the former Sylvania Facility, and is located at depth beneath the Site.
 - The data on Figure 4-3 lastly indicates that groundwater at King Kullen may have been impacted by contaminated water that was discharged at PRD. Historically, PRD pumped groundwater from the well(s) discussed in Section 3.2.2 and used the water for non-contact cooling water before discharging it into on-site recharge basin. However, some of the groundwater extracted by these wells captured PCE, TCE, cis-1,2-DCE, and 1,2-DCB beneath PRD and then discharged the contaminated water into the PRD recharge basin, creating a southern plume shown on Figure 4-3. The PRD SPDES records in Appendix F show that water containing PCE (0.34 mg/L), TCE (1.7 mg/L), cis-1,2-DCE (0.5 mg/L), and 1,2-DCB (0.16 mg/L) was discharged to the recharge basin in 1982.
3. The Anchor Chemical Site, located at 500 West John Street, includes a 28,850 square foot, two story building, a small lawn area in the front of the Site-building, and a paved parking lot in the front and rear of the building (NYSDEC, 2011). Operations at the Site began in 1964 and included manufacturing, blending and storage of chemicals for

the graphic arts industry. A total of 17 underground storage tanks ("USTs") were installed at the Site, which ranged in size from approximately 500 to 4,000 gallons (USEPA, 1999). Seven above ground storage tanks ("ASTs") were also installed at the Site, ranging in size from approximately 550 to 1,500 gallons. These USTs and ASTs contained various chemicals, including acetone, TCA, methylene chloride, 2-butoxyethanol and isopropyl alcohol. Additionally, nine dry wells and one drain were installed at the Site in order to collect runoff and drainage from the building. The dry wells were not connected to a sewer, and liquid that collected in these wells infiltrated directly to the soil and ultimately groundwater beneath and downgradient from the Site.

The Site is located to the south of the regional groundwater divide of Long Island (Anson Environmental, 1995). It is underlain by Upper Glacial and Magothy Aquifers, the latter of which is a primary drinking water source on Long Island. Depth to groundwater at the Site is approximately 60 feet below ground surface (ft bgs) (Earth Tech Northeast, Inc., 2007), and measured groundwater elevations collected during investigation activities at the Site indicate that groundwater flows in a south-southwesterly direction (Anson Environmental, 1993).

Site inspections conducted in 1977 by the Nassau County Department of Health ("NCDH") revealed that during the production, mixing, and delivery of chemicals at the Site, spillage occurred that contaminated dry wells located throughout at the Site (USEPA, 1995b). Water samples taken on July 27, 1977 from the dry well at the north end of the Site contained elevated levels of TCA (2,500 ppb), TCE (15,000 ppb), and PCE (20,000 ppb), all of which were used in on-site operations. Following these detections, the dry wells were reportedly sealed without remediation. In 1981, tightness tests were performed on 14 of the 17 USTs at the Site, six of which revealed failures and established an additional source of contamination at the Site (USEPA, 1999). Five of the tanks were decommissioned in 1983, and the remaining tanks were decommissioned in 1991.

Following the tank test failures, the NCDH directed Anchor to perform a groundwater investigation to assess impacts at the Site. In response, three monitoring wells were installed in 1982, which revealed high concentrations of TCA (11,000 ppb) under the Site, as well as elevated concentrations of PCE, dichloroethane (DCA), chlorodibromomethane, methylene chloride, and TCE (USEPA, 1995b). However, again no groundwater remediation was performed at that time. Thereafter, between 1989 and 1992, Anchor performed a Remedial Investigation (RI) which identified several constituents, including TCA and other organic compounds, in sediment and groundwater samples taken from the dry wells on the Site (Anson Environmental, 1995). The investigation concluded that the dry wells presented a potentially continuous source of contamination to underlying groundwater. As a result, liquid, sediments, and soils were excavated from the dry wells, which were then backfilled with clean fill (USEPA, 1996).

Because EPA determined that the Site did not pose an immediate threat to human health or the environment—and without performing groundwater remediation at the Site—a Record of Decision (“ROD”) was issued by the EPA for the Site on September 29, 1995 which, following the removal action associated with the dry wells, required no further action on Anchor’s part (USEPA, 1995a). However, several years later in 2003, an investigation conducted downgradient of the Site by a third-party, detected TCA at a concentration of 57 ppb at approximately 100 ft bgs (Earth Tech Northeast, Inc., 2007). In response to this detection—and given that low level TCA detections were found in the downgradient public supply well between 1977 and 2005 and the fact that there was no adequate off-site investigation performed by Anchor as part of its earlier remedial activities—the NYSDEC determined that an off-site groundwater investigation was necessary to determine whether there exists a public health threat from contamination migrating from the Site.

Between 2008 and 2010, additional investigations were conducted by the NYSDEC to evaluate off-site groundwater contamination and soil vapor concerns at the Site. The investigation was planned in two phases (Phase I and Phase II) (Earth Tech Northeast, Inc., 2007). The first phase included the installation and sampling of seven CMT multi-level wells (PW-1 to PW-7). The second phase required installation of additional well clusters deeper and further downgradient from the Site, provided the results from the Phase I investigation warranted further characterization. Following installation of the Phase I CMT wells, sampling conducted in July 2008 revealed high concentrations of acetone under the Site, as well as elevated concentrations of TCA, PCE and other VOCs at wells located deeper and further downgradient from Site (i.e. TCA detected in PW-2, PW-3 and PW-6 (100-120 ft bgs) and PW-4 (161-163 ft bgs); PCE detected in PW-2 and PW-3 (160-162 ft bgs) and PW-6(221-222 ft bgs) and TCE detected in PW-2 (160-162 ft bgs) and PW-6 (118-120)) (Earth Tech AECOM, 2009). A re-sampling of the wells in November 2008, identified a significant decrease in measured concentrations of VOCs. As a result, no additional off-site characterization was required and the Phase II investigation was not performed. Based on the Phase I groundwater investigation, the State concluded that all off-site groundwater concerns and the soil vapor concerns were adequately addressed and no further action was required.

An evaluation of the investigation and resulting data, however, indicates that drawing the above conclusion from the limited recent data set was premature and likely incorrect. First, the investigation was too limited in scope, both in terms of downgradient extent and overall depth. Second, the data that was collected from recent and historical investigations demonstrate the presence of contamination of the same type released from the Anchor Site in groundwater downgradient from the Site. These contaminants are following a clear path leading to two large public water supply wells that provide drinking water for the Hicksville area.

The groundwater investigation was conducted over 30 years after contamination was identified in dry wells at the Site and the dry wells were reportedly sealed, more than

25 years after leaking USTs were removed and contamination was found in groundwater under the Site, and more than 10 years after the removal action at the Site was complete. While the results from the recent groundwater investigation indicate an absence of significant contamination in groundwater at and immediately downgradient of the Site at relatively shallow depths, this result was expected given the rate of groundwater movement and the tendency for contamination to move deeper within the aquifer as it migrates downgradient. What is foreseeable and remains reasonable to expect is that contamination from the Site has migrated deeper and further south-southwest than the current monitoring well network installed at and downgradient of Anchor was capable of detecting. In addition, because of several factors, including: (a) the historic detections of elevated concentrations of chlorinated solvents (including TCA, PCE and TCE) at the Site, (b) the measured groundwater flow directions (which indicate a south-southwesterly flow), (c) the detection of TCA in the downgradient profile P-30 (with PCE at the same depth); and (d) the historic detections of TCA in downgradient public supply wells, releases from the Anchor Site have likely contributed to the comingled VOC plume to the south-southwest of the Site.

20. **Please state the name, title and address of each individual who assisted or was consulted in the preparation of your response to this Request for Information. In addition, state whether each person has personal knowledge of the answers provided.**

- Jean Agostonelli, Verizon Corporate Services Group, Inc., One Verizon Way, Basking Ridge, NJ 07920, (908) 559-3687.

CERTIFICATION

On behalf of Osram Sylvania, Inc., I have read the responses to the information request referenced in this letter. The responses were prepared by or with the assistance of agents, employees, representatives and/or attorneys of Osram Sylvania, Inc., or others believed to have relevant information and with the assistance of Counsel, upon which I have relied. The responses set forth herein, subject to inadvertent or undiscovered errors or omissions are based on and therefore necessarily limited by the records and information still in existence, recently recollected, thus far discovered in the course of the preparation of these responses, and currently available to Osram Sylvania, Inc. Consequently, Osram Sylvania, Inc. reserves the right to make any changes in or additions to any of the responses if it appears that at any time errors or omissions have been made therein or that more accurate or complete information becomes available. My declaration below is subject to this paragraph.

On behalf of Osram Sylvania, Inc., I hereby certify that the answers to all of the foregoing questions are given in good faith and are truthful, full and complete to the best of my knowledge and belief.

